

AMENDMENT TO THE CLAIMS

1. (Currently Amended) An article for measuring external drug transfer to skin surfaces, ~~comprising~~ consisting essentially of:

a polyolefin substrate film including at least one of the group consisting of polyethylene and polypropylene, the film having a weight-average molecular weight between about 3 and about 6 kilograms/mole; and

a skin-adhering element attached to the polyolefin substrate film, wherein the ~~article~~ film is free of aromatic organic compounds, polyenes, acrylates, esters, waxes, dimethicones and silicone-based compounds.

2. (Original) The article of Claim 1, wherein the film has a weight-average molecular weight between about 3 and about 4 kilograms/mole.

3. (Original) The article of Claim 1, wherein the polyolefin substrate film comprises a surface texture having a roughness, calculated as an arithmetic sum of all deviations about a best-fit mean plane through topographical surface data, of between about 19 and about 32 microns.

4. (Original) The article of Claim 1, wherein the polyolefin substrate film comprises a surface texture having human skin topography.

5. (Original) The article of Claim 1, wherein the skin-adhering element comprises an adhesive selected from the group consisting of a polyacrylate ester based hydrogel adhesive, a polymethacrylate ester based hydrogel adhesive, a high solids moisture resistant latex pressure-sensitive adhesive, and a polyalkyloxazoline-reinforced acrylic pressure-sensitive adhesive.

6. (Original) The article of Claim 5, wherein the adhesive comprises components each having a minimum molecular weight of at least 1,500 daltons.

7. (Original) The article of Claim 5, wherein the adhesive has a boiling point of at least 250° Celsius.

8. (Original) The article of Claim 1, wherein the skin-adhering element comprises an electrostatic adhesive.

9. (Original) The article of Claim 8, wherein the polyolefin substrate film has a thickness of less than 80 microns.

10. (Original) The article of Claim 1, further comprising packaging materials in contact with the polyolefin substrate film, wherein the packaging materials are non-interfering with respect to analysis of the drug being measured.

11. (Original) The article of Claim 1, wherein the polyolefin substrate film has a shape selected from the group consisting of triangular, square, circular, oval, rectangular, octagonal, and hexagonal.

12. (Original) The article of Claim 1, wherein the polyolefin substrate film has a maximum length of between about 1 centimeter and about 10 centimeters.

13. (Currently Amended) An article for measuring external drug transfer to skin surfaces, ~~comprising~~ consisting essentially of:

a polytetrafluoroethylene substrate film having a weight-average molecular weight between about 35 and about 65 kilograms/mole; and

a skin-adhering element attached to the polytetrafluoroethylene substrate film, wherein the ~~article~~ polytetrafluoroethylene substrate film is free of aromatic organic compounds, polyenes, acrylates, esters, waxes, dimethicones and silicone-based compounds.

14. (Withdrawn) The article of Claim 13, wherein the film has a weight-average molecular weight between about 45 and about 55 kilograms/mole.

15. (Withdrawn) The article of Claim 13, wherein the polytetrafluoroethylene substrate film comprises a surface texture having a roughness, calculated as an arithmetic sum of all deviations about a best-fit mean plane through topographical surface data, of between about 19 and about 32 microns.

16. (Withdrawn) The article of Claim 13, wherein the polytetrafluoroethylene substrate film comprises a surface texture having human skin topography.

17. (Withdrawn) The article of Claim 13, wherein the skin-adhering element comprises an adhesive selected from the group consisting of a polyacrylate ester based hydrogel adhesive, a polymethacrylate ester based hydrogel adhesive, a high solids moisture resistant latex pressure-sensitive adhesive, and a polyalkyloxazoline-reinforced acrylic pressure-sensitive adhesive.

18. (Withdrawn) The article of Claim 17, wherein the adhesive has a minimum molecular weight of at least 1,500 daltons.

19. (Withdrawn) The article of Claim 17, wherein the adhesive has a boiling point of at least 250° Celsius.

20. (Withdrawn) The article of Claim 13, wherein the skin-adhering element comprises an electrostatic adhesive.

21. (Withdrawn) The article of Claim 20, wherein the polytetrafluoroethylene substrate film has a thickness of less than 80 microns.

22. (Withdrawn) The article of Claim 13, further comprising packaging materials in contact with the polytetrafluoroethylene substrate film, wherein the packaging materials are non-interfering with respect to analysis of the drug being measured.

23. (Withdrawn) The article of Claim 13, wherein the polytetrafluoroethylene substrate film has a shape selected from the group consisting of triangular, square, circular, oval, rectangular, octagonal, and hexagonal.

24. (Withdrawn) The article of Claim 13, wherein the polytetrafluoroethylene substrate film has a maximum length of between about 1 centimeter and about 10 centimeters.

Claims 25-35 (Canceled)

36. (New) An article for measuring external drug transfer to skin surfaces, comprising:

a polyolefin substrate film including a skin-adhering surface, the skin-adhering surface consisting of a skin-adhering element attached to the polyolefin

substrate film, wherein the polyolefin substrate film is free of aromatic organic compounds, polyenes, acrylates, esters, waxes, dimethicones and silicone-based compounds.

37. (New) The article of Claim 36, wherein the polyolefin substrate film comprises at least one of the group consisting of polyethylene and polypropylene, and the film having a weight-average molecular weight between about 3 and about 6 kilograms/mole.

38. (New) The article of Claim 37, wherein the film has a weight-average molecular weight between about 3 and about 4 kilograms/mole.

39. (New) The article of Claim 36, wherein the polyolefin substrate film comprises a polytetrafluoroethylene substrate film having a weight-average molecular weight between about 35 and about 65 kilograms/mole.

40. (New) The article of Claim 36, wherein the polyolefin substrate film comprises a surface texture having a roughness, calculated as an

arithmetic sum of all deviations about a best-fit mean plane through topographical surface data, of between about 19 and about 32 microns.

41. (New) The article of Claim 36, wherein the polyolefin substrate film comprises a surface texture having human skin topography.

42. (New) The article of Claim 36, wherein the skin-adhering element comprises an adhesive selected from the group consisting of a polyacrylate ester based hydrogel adhesive, a polymethacrylate ester based hydrogel adhesive, a high solids moisture resistant latex pressure-sensitive adhesive, and a polyalkyloxazoline-reinforced acrylic pressure-sensitive adhesive.

43. (New) The article of Claim 42, wherein the adhesive comprises components each having a minimum molecular weight of at least 1,500 daltons.

44. (New) The article of Claim 42, wherein the adhesive has a boiling point of at least 250° Celsius.

45. (New) The article of Claim 36, wherein the skin-adhering element comprises an electrostatic adhesive.

46. (New) The article of Claim 36, further comprising packaging materials in contact with the polyolefin substrate film, wherein the packaging materials are non-interfering with respect to analysis of the drug being measured.